

Country Paper

Reaching Remote Villages

Community Networking Service Centers in Benin

Summer 1999

There is another Africa today, says Father Nzamujo
Godfrey Ugwuegmulam.
This Africa is not yet known by the mass media. But there are a growing number of [us who] refuse to accept a gloomy picture of the future.... We have no right to decry what is happening...and stop there.
The way to change that picture is to build another Africa — our Africa.

African Farmer January 1994, p. 41

ANOTHER AFRICA

When famine broke out in Africa in the mid-1980s, Father Nzamujo returned to the continent from the United States determined to end hunger in his homeland. A Dominican priest from Nigeria, he was driven by a mission to create an African definition of development, with "production systems based on the relative or comparative advantage of Africa...The African heat, humidity, biological lives (bacteria, insects and flies), African cultural heritage and conceptual framework should be at the basis of our new economic order," he explains. The bottom line is that people "must be capable of harnessing the resources around them."

To begin the process, Father Nzamujo founded the Songhai Center in Benin.

Bean Street Street

THE SONGHAI STORY

Songhai Center has been described as a bio-agricultural research and training institute, which, technically, is true. But no one wears white lab coats there, and a great deal more than organic gardening is going on. It has been hailed as wonderfully inventive, innovative and entrepreneurial and even singled out as a pioneer in sustainable development. But that falls short, too. For Songhai Center is engaged in no less than a process of reclaiming the continent by valorizing indigenous knowledge, local resources and traditional wisdom. The philosophy behind Songhai is that "technologies must be developed by specific people living in specific places and specific conditions to meet their specific needs."

What this means in practical terms is that Songhai creates new ways of doing what must be done, developing and experimenting with innovations in the service of sustainable agriculture, animal husbandry, appropriate technology, food distribution, marketing, financial management and on-site follow-up to help farmers develop viable local organizations and networks. As rural Benin revolves around agriculture, the results reach well beyond the business of food and



the role of farmers, improving the access of village people to information, the efficiency of traditional village systems, and the effectiveness of essential patterns of social and economic organization. In short, Songhai Center is improving the overall quality of village life.

The Furthest Reaches of Benin

Songhai's headquarters is in Porto Novo, the heart of Benin's political capital in the southern part of the country. Young farmers and entrepreneurs come from all over the continent to work on the Songhai farm, and they take their experience home to share with their communities.

But that's not enough for Father Nzamujo, who wants Songhai's messages to reach the most remote regions of Benin.

Communication is practically nonexistent with far-flung villages in the north of the country, where most of the population resides and where even telephones are rare. So Songhai has decided to take two important steps to bring the mountain, so to speak, to the people. First, two new Songhai centers are opening in 1999, one in Savalou to cover the center of the country, and another in Parakou, the gateway to the north.

Zoom in on Benin

Geography

Area: 112,620 sq. km. (slightly smaller than Pennsylvania)

Location: Western Africa, bordering the North Atlantic Ocean, Burkina Faso, Niger, Nigeria, Togo

Environmental issues: droughts; inadequate supplies of potable water;

poaching threatens wildlife; deforestation; desertification **Arable land:** 13%

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People

Population: 5,902,178

Population growth rate: 3.31% **Age structure:** 0-14: 48%; 15-64:

50%

Birth rate: 46.28 births/1,000 **Infant mortality:** 102.7 deaths/

1,000 births

Life expectancy at birth: 53.15 Total fertility rate: 6.56 children

born/woman

Ethnic groups: 42, most important being Fon, Adja, Yoruba, Bariba Religions: indigenous beliefs 70%, Muslim 15%, Christian 15% Languages: French (official), Fon and Yoruba, tribal languages

Literacy (age 15 and over can read and write): total population 37%, male 48.7%, female 25.8%

Economy

GDP: \$8.2 billion

GDP per capita: \$1,440

GDP by sector: agriculture 36.8%, industry 12.6%, service 50.6%

Inflation rate: 14.5%

Rudget: revenues \$272 mi

Budget: revenues \$272 million, expenditures \$375 million

Communications

Telephones: 16,200

Radio broadcast stations: AM2,

FM2

Television broadcast stations: 2

Televisions: 20,000

U.S. Department of Commerce, National Trade Data Bank, February 19, 1999

LearnLink



West African boys harvesting vegetables

Second, all three Songhai sites will host, manage and operate community networking service centers (CNSCs), where computers will enable audio, video and text communication via intranet, email and the internet, linking Songhai sites with each other and with the world at large.

Connectivity sans infrastructure? To compensate for the poor electricity and telecommunications in the country, Songhai's CNSCs will use solar power and high frequency microwave links to run the computers and high frequency digital radio technology to ensure reliable and fast communication links. In addition to achieving a quality and speed of transmission that is not possible using local telephone lines, this technology will greatly reduce operating costs. It also will enable

Porto Novo, where external connectivity is better, to serve as a relay center for connectivity from the more remote locations of Parakou and Sayalou.

Songhai Center has built a vast network of development partners within Benin and internationally with whom it maintains contact, exchanges information, provides services and implements collaborative projects. Pioneering electronic networking, distance education and lifelong learning is a natural extension of this role.

Of the Village

Songhai's two new centers look much like the other farms in the areas where they are located. Both are set in the middle of clusters of villages, and local people view



them as no more — and no less — than new neighbors. Because the centers are very much of the village, sharing common concerns and working alongside local people, Father Nzamujo does not expect a debate among residents about the appropriateness of computers. He does not anticipate that people will question whether the tool may be too sophisticated for them or whether more basic inputs should take precedence. The bottom line is that this is a way for Songhai to get its information about how to produce bricks that do not need baking, for example, to people throughout the country, making the construction of new houses easier for everyone. It is a means of spreading information about methods for increasing agricultural yields, decreasing disease among livestock, and organizing work more efficiently. Access to useful information is wanted. needed and welcomed, and though electronic communication is new and different, it is also fast and full of promise and potential. The computers are not expected to be controversial because, at the end of the day, content is king.

Services Offered by Songhai's CNSCs

Computer access — wordprocessing, database and spreadsheet, graphics

Communication/Information Services fax, email, www/internet, intranet, web chats, teleconferencing, CD-ROM, hard copy information

Training — in general computer use, use of communications/information services offered, development of multimedia learning materials, training site for groups and individuals using distance learning courses

Development of learning materials — CD-ROMs, multimedia modules and

The CNSC project will include a training program for staff at each of the three centers, who, in turn, will provide the population in general with the opportunity to learn about and use information technologies. Under the leadership of Father Nzamujo, who is a highly qualified computer engineer as well as a microbiologist, the Songhai Centers have both the vision and the technical competence to

For his achievements at Songhai, The Hunger Project named Father Nzamujo 1993 Africa Prize co-laureate.

For his work for Africa, the kings (chiefs) of Benin gave him the title Majeobaje, which means He who won't let evil happen.



introduce and integrate CNSCs into the villages of northern Benin.

Location Matters

Location is a real challenge in Benin, as it is in much of the developing world. Where they exist, telecenters, cybercafes and community learning centers are typically established in more well-serviced urban centers, not in remote or rural areas. Certainly, the infrastructure in primary urban areas is more conducive to the establishment of such services, where a concentration of population is necessary to maintain financial viability. But it is also true that secondary and tertiary urban centers, precisely because they lack the

support available in capital cities, may have more pressing need of the services than their urban counterparts.

In the case of internet connectivity in Africa, the political capitals are the focus of early efforts while smaller towns, some of which are educational or economic centers in their own right, are under-serviced or not serviced at all. It is important that the tendency to concentrate new resources in areas already relatively well serviced be addressed through an effort to extend valuable learning services more broadly. This is what Songhai's CNSCs is all about. As Father Nzamujo puts it, "What we've been saying on the corner is now out in the public."

LearnLink's Role

The CNSC project is supported by USAID and implemented by LearnLink, a project of the Academy for Educational Development. Connecting individuals and communities with the resources they need to accomplish their own development objectives is a central purpose of LearnLink's work.

More specifically, LearnLink is charged with the following in Benin:

- Establishing 3 networked, multi-media capable pilot Community Networking Service Centers (CNSCs)
- Providing technical assistance to help Songhai staff develop and administer distance learning courses and www sites and to take advantage of the research capacity of the internet
- Renovating and rewiring the three proposed locations
- Purchasing and installing the computers and other equipment and supplies for the Centers and training local staff in their installation and maintenance
- Ensuring that the Centers are able to provide services that meet community needs
- Developing and implementing a realistic self-sustainability plan for each of the Centers
- Employing experienced local staff to provide management, administration and training services for the Centers
- Providing training and TA for Center staff and other Songhai staff in the use, maintenance and development of internet and distance learning pedagogy, including the development of multimedia learning packages
- Developing and implementing a monitoring and evaluation system for the CNSCs.

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Traditional West African village

The Best of Both Worlds

Songhai's Community Service Networking Centers will serve three formal development objectives: (1) allow for the more ready sharing of Songhai's Porto Novo experience with the students, faculty and communities at the new centers (and beyond) via internet or CD-ROM delivered, multi-media distance learning courses; (2) facilitate the administration of the new centers through a Songhai intranet; and (3) enable Songhai to share more of its experience with the larger development world through the World Wide Web.

Existing Songhai staff will be trained to run the Centers, where services will be free, initially, or subsidized to familiarize clients with what is offered. After three months, a fee-for-services structure will be developed to ensure sustainability.

As Father Nzamujo has recognized, the computer networking service centers are the most effective, efficient and practical way to extend the Songhai experience to many more people in Benin and throughout Africa. As such, they exemplify Songhai's larger approach to development: integrating carefully selected methods, processes, techniques, inventions and ideas from the modern era with traditional economic, cultural and environmental systems — in other words, restructuring reality for the better while keeping the roots intact.



Money is Like Water

Commenting on African development in general, Father Nzamujo has observed that:

Money is like water. If the soil is sandy, it runs away. The world has watered African society with money, and it has eroded the society. No one has invested in the absorptive capacity.

The Community Networking Service Centers (CNSC) project at Songhai is expected to provide communication, education and life-long learning opportunities within Benin and help build internet access in Africa. As such, the initiative will strengthen Songhai's capacity to promote an African driven model of development, extend the Songhai vision for sustainable development, and, as Father Nzamujo would agree, invest directly in Africa's absorptive capacity.

A Visit from Father Nzamujo

We've beaten the University in growing Talapia (cat fish). They got 1.4 gram per day, we get 1.6! We produce 4 tons of insect larvae per month to feed the fish—these insects never take a day off! We raise 3,000 chicks per week, and from the chicken houses we take the droppings to feed the insects. It keeps the insects away from us!

One boy put small palm lamps onto the fish ponds. It attracts the bugs, they get their wings wet and then the fish eat them! The youth compete at creating new ways!

Usually only 10% of catfish survive. In the west you increase that by running water, which is a real waste. These fish spawn during the rainy season. We stimulate the rainy season with a shower head! Then we lower the water level and remove the parents, so they won't eat the eggs. 30% of eggs hatch. Usually the fish are killed by ammonia that is released when the other eggs decay. So we add bacillus that attach to the old eggs and encapsulate the ammonia. Then we add daphnia to eat the bacillus and free oxygen. We get a 90% survival rate, and we've doubled the growth

Songhai is also exploring herbal medicines. Java, a baboon, is the genius that finds the herbs. When she eats a spoiled mango and gets dysentery, we let her loose and follow her to find the herbs she eats to get well.

From The Hunger Project http://www.thp.org

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For additional information contact:

Dr. Dennis Foote Project Director (202) 884-8708 dfoote@aed.org



LearnLink Project, AED 1825 Connecticut Avenue, NW Washington, DC 20009 Fax: (202)884-8979 Email: llink@aed.org www.aed.org/learnlink Steven Dorsey Deputy Director (202) 884-8724 sdorsey@aed.org

Dr. Anthony Meyer G/HCD/BELS (202) 712-4137 ameyer@usaid.gov



Dr. Luis Rodriguez G/HCD/BELS (202) 712-0168 lrodriguez@usaid.gov